5-30 -05

GRAPHIC CHEMICAL & INK -- COPPER ETCHING SOLUTION, 922-00 MATERIAL SAFETY DATA SHEET NSN: 685000D005347 Manufacturer's CAGE: 7Y766 Part No. Indicator: A Part Number/Trade Name: COPPER ETCHING SOLUTION, 922-00 ______ General Information Company's Name: GRAPHIC CHEMICAL AND INK CO Company's Street: 728 N YALE AVE Company's P. O. Box: 27 Company's City: VILLA PARK Company's State: IL Company's Country: US Company's Zip Code: 60181 Company's Emerg Ph #: 312-832-6004 Company's Info Ph #: 312-832-6004 Distributor/Vendor # 1: BLICK DICK CO (800-447-8192) Distributor/Vendor # 1 Cage: 06608 Safety Data Action Code: C Record No. For Safety Entry: 001 Tot Safety Entries This Stk#: 001 Status: SE Date MSDS Prepared: 01NOV91 Safety Data Review Date: 20AUG96 Supply Item Manager: 75 MSDS Preparer's Name: UNKNOWN MSDS Serial Number: BZZBV Specification Number: UNKNOWN Spec Type, Grade, Class: UNKNOWN Hazard Characteristic Code: T6 Unit Of Issue Container Qty: 1 PT (MSDS) Type Of Container: UNKNOWN Net Unit Weight: 1.0 LBS NRC/State License Number: NOT RELEVANT ______ Ingredients/Identity Information ______ Proprietary: NO Ingredient: FERRIC CHLORIDE (CERCLA) Ingredient Sequence Number: 01 Percent: 0.39 NIOSH (RTECS) Number: LJ9100000 CAS Number: 7705-08-0 OSHA PEL: 1 MG (FE)/M3 ACGIH TLV: 1 MG (FE)/M3; 9596 Other Recommended Limit: NONE RECOMMENDED ______ Physical/Chemical Characteristics _______ Appearance And Odor: REDDISH BROWN LIQUID Boiling Point: 442F,228C Melting Point: UNKNOWN

Vapor Pressure (MM Hg/70 F): UNKNOWN

Vapor Density (Air=1): <1
Specific Gravity: 1.0</pre>

Decomposition Temperature: UNKNOWN Evaporation Rate And Ref: <1 (ETHER=1)

Solubility In Water: COMPLETE

Viscosity: UNKNOWN

Radioactivity: NOT RELEVANT Corrosion Rate (IPY): UNKNOWN

Fire and Explosion Hazard Data

Flash Point: NONE

Extinguishing Media: WATER SPRAY, CARBON DIOXIDE, FOAM OR DRY CHEMICAL FOR SURROUNDING FIRE. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS.

Special Fire Fighting Proc: WEAR PROTECTIVE CLOTHING AND NIOSH-APPROVED SELF-CONTAINED BREATHING APPARATUS.

Unusual Fire And Expl Hazrds: NONE

Reactivity Data

Stability: YES

Cond To Avoid (Stability): NONE

Materials To Avoid: MOST COMMON METALS INCLUDING IRON, STEEL, COPPER AND BRASS

Hazardous Decomp Products: UNKNOWN *

Hazardous Poly Occur: NO *

Conditions To Avoid (Poly): NOT RELEVANT *

Health Hazard Data

LD50-LC50 Mixture: LD50 (ORAL, RAT) IS UNKNOWN. *

Route Of Entry - Inhalation: NO *

Route Of Entry - Skin: NO *

Route Of Entry - Ingestion: NO *

Health Haz Acute And Chronic: TARGET ORGANS: EYE, SKIN. ACUTE- EYE CONTACT MAY CAUSE BURN. INHALATION NOT LIKELY. MAY BE HARMFUL IF SWALLOWED. MAY CAUSE SLIGHT SKIN IRRITATION. CHRONIC- UNKNOWN. *

Carcinogenicity - NTP: NO *

Carcinogenicity - IARC: NO *

Carcinogenicity - OSHA: NO *

Explanation Carcinogenicity: NONE *

Signs/Symptoms Of Overexp: IRRITATION, BURN *

Med Cond Aggravated By Exp: PERSONS WITH PRE-EXISTING SKIN DISORDERS, EYE PROBLEMS MAY BE MORE SUSCEPTIBLE TO THE EFFECTS OF THIS PRODUCT. *

Emergency/First Aid Proc: GET MEDICAL HELP IF SYMPTOMS PERSIST.

INHALED: REMOVE TO FRESH AIR. EYES: FLUSH WITH WATER FOR 15 MINUTES, HOLDING EYELIDS OPEN. SKIN: WASH WITH SOAP & WATER. ORAL: CALL PHYSICIAN. *

Precautions for Safe Handling and Use

Steps If Matl Released/Spill: PREVENT SKIN AND EYE CONTACT. ABSORB SPILLS WITH INERT MATERIAL SUCH AS SAND OR VERMICULITE. SCRAPE SPILL UP INTO NONPOROUS CONTAINERS. DO NOT FLUSH TO SEWER. *

Neutralizing Agent: NOT RELEVANT *

Waste Disposal Method: DISPOSE OF IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS. *

Precautions-Handling/Storing: STORE IN CLOSED CONTAINER. *

Other Precautions: WASH THOROUGHLY WITH SOAP AND WATER AFTER HANDLING AND BEFORE EATING, DRINKING, SMOKING. KEEP OUT OF REACH OF CHILDREN. DO NOT TAKE INTERNALLY. DO NOT GET IN EYES OR ON SKIN. *

Respiratory Protection: NONE REQUIRED. *

Ventilation: NONE REQUIRED. *

Protective Gloves: BUTYL RUBBER RECOMMENDED *

Eye Protection: CHEMICAL SPLASH GOGGLES/SAFETY GLASSES *

Other Protective Equipment: EYE WASH STATION, SAFETY SHOWER, PROTECTIVE CLOTHING *

Work Hygienic Practices: OBSERVE GOOD INDUSTRIAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. *